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Anti-MUSK Reference Antibody (Argenx patent anti-MuSK)

Recombinant Antibody Catalog # APR10989

Product Information

Application FC, Kinetics, Animal Model

Primary Accession <u>015146</u>

Reactivity Human, Mouse
Clonality Monoclonal
Isotype IgG1

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Calculated MW 97056

Additional Information

Target/Specificity MUSK

Endotoxin

Conjugation Unconjugated

Expression system CHO Cell

Format Purified monoclonal antibody supplied in PBS, pH6.0, without

preservative. This antibody is purified through a protein A column.

Protein Information

Name MUSK

Function Receptor tyrosine kinase which plays a central role in the formation and the

maintenance of the neuromuscular junction (NMJ), the synapse between the motor neuron and the skeletal muscle (PubMed: 25537362). Recruitment of AGRIN by LRP4 to the MUSK signaling complex induces phosphorylation and activation of MUSK, the kinase of the complex. The activation of MUSK in myotubes regulates the formation of NMJs through the regulation of different processes including the specific expression of genes in subsynaptic nuclei, the reorganization of the actin cytoskeleton and the clustering of the

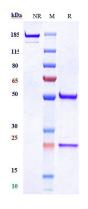
acetylcholine receptors (AChR) in the postsynaptic membrane. May regulate AChR phosphorylation and clustering through activation of ABL1 and Src family kinases which in turn regulate MUSK. DVL1 and PAK1 that form a ternary complex with MUSK are also important for MUSK-dependent regulation of AChR clustering. May positively regulate Rho family GTPases through FNTA. Mediates the phosphorylation of FNTA which promotes prenylation, recruitment to membranes and activation of RAC1 a regulator of the actin cytoskeleton and of gene expression. Other effectors of the MUSK signaling include DNAJA3 which functions downstream of MUSK. May also

play a role within the central nervous system by mediating cholinergic responses, synaptic plasticity and memory formation (By similarity).

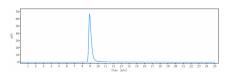
Cellular Location

Postsynaptic cell membrane; Single-pass type I membrane protein. Note=Colocalizes with acetylcholine receptors (AChR) to the postsynaptic cell membrane of the neuromuscular junction

Images



Anti-MUSK Reference Antibody (Argenx patent anti-MuSK) on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 95%



The purity of Anti-MUSK Reference Antibody (Argenx patent anti-MuSK)is more than 95% ,determined by SEC-HPLC.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.